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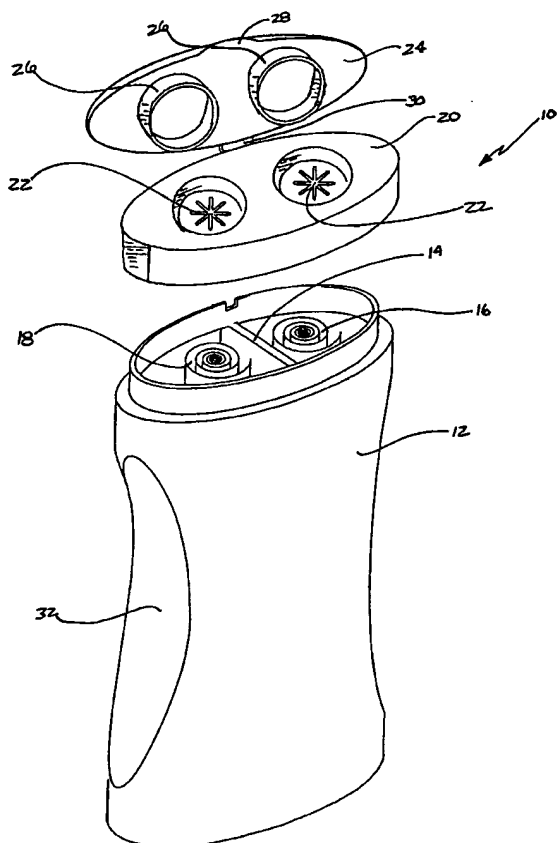
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- (71) Applicant (for all designated States except US): PETRO-FERM, INC. [US/US]; 2416 Lynndale Road, Fernandina Beach, FL 32034 (US). (84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).
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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

[Continued on next page]

(54) Title: DISPENSING DEVICE



(57) Abstract: A multi-chamber hand grip dispensing device for towelettes having at least one bisecting wall disposed crosswise through the device, defining at least two chambers in the body of the device for containing and dispensing a roll of towelettes from each chamber. The dispenser body preferably holds towelettes which are saturated with various car care detailing compositions, such as special cleaning and defogging composition for windshields, tire dressing chemicals, dashboard cleaners and conditioners, leather or vinyl conditioners, and the like. The overall design is meant to allow for a single dispenser device to be carried a person that is cleaning or detailing their car, with some or all of the desirable chemical compositions saturated onto perforated tear-off towelettes that can be dispensed from the top of the dispensing device.

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DISPENSING DEVICE

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CROSS REFERENCES TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No. 60/269,134 filed on February 15, 2001.

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TECHNICAL FIELD

This invention relates generally to dispensing devices, and more particularly to a multi-chamber dispensing device for dispensing pre-conditioned towelettes generally used for cleaning or detailing.

BACKGROUND OF THE INVENTION

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Saturated towelettes are especially useful in many industries, including the car care industry, and for general cleaning purposes of windows, household items and exterior products. However, the cleaning of many of these items has been problematic in that a multitude of cleaning products must be dragged around to the site where the cleaning is to take place. In the instance of car cleaning and car detailing, there are many products which most people use to detail their car. For most detailers, there is the car wax, window cleaner, carpet and upholstery cleaners, the tire dressing or blackening preparation, the windshield silicone treatment, the interior dashboard treatments, and the leather/vinyl seating treatments, just to name a few. Consequently, as one gathers all of the necessary cleaning implements and solutions, the total number for preparation becomes cumbersome.

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It is, therefore, one object of the present invention to decrease the number of items which must be gathered and taken to the automobile for detailing. Although the present

invention will be discussed in terms of detailing cars, it must be noted that the present inventors also envision the cleaning products being used for cleaning, treating, drying and detailing nearly anything, including, but not limited to, boats, motorcycles, windows on homes and buildings, campers/mobile homes, barbeque grills, lawn furniture, and many indoor applications where those cleaning products would be useful.

Therefore, consumers and the car detailing supply industry have been looking for new products to decrease the amount of time and energy needed to detail one's car. The present inventors have come up with a full series of car detailing products which may be saturated onto rolls of towelettes. Some of the other preparations to be dispensed may also include cleaners and waxes, as well as dry wipes for automotive finishes, cleaner and brake dust repellents for wheels, cleaners and protectants for tires, cleaner and dry wipe for windshields and glass (automotive, industrial and household), cleaner and wax and protectant for marine applications, cleaners, waxes and dry wipes for surfboards, cleaner and lubricant/protectant for guns and other metal surfaces, cleaner and metal conditioner/surface treatment for metal plating industries, cleaner and metal conditioner/surface treatment for auto body paint and repair, cleaner and waxes for detailing motorcycles and mobile homes, cleaner for barbeque grills, lawn furniture and many indoor applications where those cleaning products would be useful. Needless to say, it is an entire bucketful of products. It would be most advantageous to be able to combine certain of these products into single dispenser packs which could be simply carried to the cleaning site with various products included therein for convenience.

In the past, separate towelettes were used in conjunction with cleaners and treatments of all types, whether the treatments were in the form of a liquid, a solid, or a spray. The inventors envision impregnated towelettes and dry towelettes with treated towelettes in one canister or dispenser. This would reduce the number of items necessary to carry. A multiple dispenser or a two-in-one product can thus be more easily transported and can also be stored more easily than a combination of individual products, whether it is put in a car glove box, a car trunk, or a home garage.

Therefore, it would be advantageous to provide a dispensing device for a multitude of various cleaning products, all in one container, in order to ease the burden of carrying numerous product containers to the cleaning site.

SUMMARY OF THE INVENTION

In accordance with the advantages enumerated above, the present invention provides a dispensing device that includes a multitude of various cleaning products in one container. The container is a dispenser body made with a useful hand grip design for easy handling, and is designed to house various means of dispensing cleaning preparations, including perforated rolls of saturated or dry towelettes, foam applicators, or liquids. The saturated, or chemically impregnated towelettes may include various car care detailing chemical compositions pre-packaged for use when detailing a car, such as windshield cleaning compositions, dashboard and car interior conditioner, tire dressing or blackening, and other similar liquid or paste wax chemical compositions to be used while detailing a car, house, building or anything else. The container includes a water-tight seal at the top so that the chemical compositions do not dry out. At least one bisecting wall is disposed crosswise to define at least two chambers in the dispensing body. A top cap dispenser piece has substantially air-tight openings cut into the top to dispense the towelettes one at a time.

The dispenser body is preferably an elongated oval-shaped cross-section body. Indentations in the sides of the dispenser body located at the apexes of the oval can act as a hand grip for easy handling. There is at least one bisecting wall to define the separate chambers for holding various chemical compositions apart from one another. The wall prevents cross-mingling of the chemical treatments. Each of the chambers are adapted to hold various materials, i.e. one or more chambers could hold a saturated roll of pre-conditioned perforated towelettes. For example, one chamber could hold a saturated roll, while the other chamber could hold a dry roll that is impregnated with other dry chemicals. The towelettes can either be in the form of a perforated roll, with successive individual sheets detachably connected in strip form, or they may be individual sheets in interlocking folded relationship with the leading edge extending through the dispensing body, as is known in the art for dispensing.

Therefore, the present invention provides a multi-chamber dispensing device which satisfies a long felt need in the car detailing industry, and accomplishes that task in a

simple and efficient manner. These and other advantages will become apparent, from the following detailed description, when considered in conjunction with the accompanying drawings.

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BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a dispenser made in accordance with the present invention;

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FIG. 2a is a side elevational view of the top cap and lid as shown in FIG. 1;

FIG. 2b is a top plan view of the top cap and lid as shown in FIG. 2a;

15

FIG. 2c is a bottom plan view of the dispensing body of the present invention;

FIG. 2d is a front elevational view of the dispensing body illustrating the hand grip indentation of the present invention; and

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FIG. 2e is a side elevational view of the dispensing body illustrating the hand grip indentation of the present invention.

DETAILED DESCRIPTION OF THE DRAWINGS

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One embodiment of the present invention is illustrated in FIGS. 1 and 2A-E. As discussed above, this is a multiple chamber dispensing device, and although it is shown with a dual dispensing chamber system, it is envisioned that there could be any number of chambers, such as three, four or more dispensing chambers within the dispensing device. The inventors envision that the products could be separated within the dispenser by either molded or inserted chambers, poly bags of all types, foil, spindles, or just placed next to each other in individual rolls or folds. The dispensing device can also include a refillable canister

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for spray liquids, foam applicators, impregnated towelettes, dry towelettes, paste wax compositions, or any other known means for delivering cleaning products.

Looking first to FIG. 1, the dispensing device is generally denoted by numeral 10, and includes multi-chambered dispenser body 12 having a multi-chamber wall 14 therein to separate the chambers. A first dispensable towelette product 16 is shown within one of the chambers defined by multi-chamber wall 14, and may be a pre-saturated or dry impregnated towelette, or a plain dry towelette, or a combination thereof, which will extend up for dispensing. A second dispensable product 18, which may also fit the above description, is shown within the other chamber within body 12. As discussed above, there could be a third, fourth or more dispensable products being housed in multiple chambers or separated by some other mechanism as well. The towelettes may either be on a roll or be interlocking individual pop-up sheets.

Dispenser top 20 is shown as a complementary shape to be received over the top of body 12. Dispenser openings 22 are shown cut into the material of dispenser top 20 to allow first and second dispensable products 16 and 18 to extend therethrough for gripping and pulling by the operator. An optional notch may be made in the container to accept a corresponding "key" in the cap in order to keep the cap in proper alignment after each use.

In order to keep an airtight seal over the dispenser openings 22, a dispenser top cap lid 24 is attached to dispenser top 20 by a hinge 30. Dispenser top cap lid 24 includes liquid, vapor or moisture seals 26 extending downwardly from the underside of dispenser top cap lid 24. Seals 26 are sized to be received within the wells to hold dispenser openings 22, in order to substantially seal air from entering and drying out the towelette products extending therethrough. Dispenser top cap lid 24 also includes a thumb catch 28 which may take the form of a protrusion (as shown) or an indentation, for ease of opening and closing. Multi-chamber dispenser body 12 may be shaped in a manner to include hand grip indentations 32 on either side of body 12 for ease of handling. The inventors envision that the hand grips can be made of any configuration known to one of ordinary skill in the art, including individual hand grip "bumps", or any other advisable shape. The hand grip area may also be shaped with no particularly noticeable traits, such as indentations, bumps, or shape.

Looking next to FIGS. 2A through 2E, like numerals will be used to reference like elements from FIG. 1: FIG. 2A shows the top of the dispenser and shows dispenser top 20 lying underneath dispenser top cap lid 24. FIG. 2B shows the top cap lid 24 of the dispenser with the logo of the company emblazoned thereon. Thumb catch 28 is shown
5 extending from the top of dispenser top cap lid 24 for ease of opening and closing. FIG. 2D is a side elevational view of the body of the dispensing device, showing hand grip indentations 32 on either side of body 12. A sectional view A-A, taken along that line, is illustrated above as FIG. 2C showing the top plan view of dispensing device 10, including body 12 and hand grip indentations 32. FIG. 2E illustrates the side elevational view of the
10 bottom portion of the dispensing device 10, showing the multi-chamber dispenser body 12 and the relative placement of hand grip indentation 32. Although not shown, the opposite side, in this embodiment, is identical and it further includes a similar hand grip indentation 32.

15 The towelettes, whether they are impregnated, non-impregnated, saturated or dry, or first and second disposable products 16 and 18, may be treated with chemicals suitable for treating dashboards, the chemicals which are suitable for treating leather or vinyl, or can be treated with chemicals suitable for cleaning the interior and/or exterior of the windshield, or for any number of other processes, where a multi-step wiping process is
20 advantageous. The towelettes may either be in a perforated roll or may be individual interlocking pop-up towelettes. Again, the towelette may also be of a dry nature. As multi-chamber wall 14 separates the various treated towelettes, various products can be packaged together in one pack.

25 The present inventors also envision that if dispensable products 16 and 18 are to be held on a spindle as shown in FIG. 1, the treated towelettes can be refilled simply and easily. The ability to refill dispensing device 10 is important. Therefore, dispenser top 20 should be easily removable from body 12 so as to be able to refill the towelettes, or any other cleaning product held within the chamber. The consumer can take a loose edge from the
30 dispensable product and draw it through the dispenser openings 22 upon refilling. As one can imagine, one of the products might be used up before the other product. Therefore, in order to give the consumer his or her best value, the ability to refill the chamber is most desirable. The dispenser could also come from out of the side of the multi-chamber dispenser body if it is so desired for the application. In the event that the treated towelettes are discovered to be

too thick to effectively be removed from dispenser openings 22, the dispenser openings could extend outwardly and vertically through body 12. Then a saturated or treated towelette would have its entire height being pulled out of the dispenser all at once. Although this is not shown in the drawings, it is envisioned by the present inventors, and is considered within the scope of their invention.

Other dispensing methods and means are envisioned by the present invention, including squeezable liquid openings that are self-sealing, pumpable liquid dispensers, "doors" that open and shut to remove foam applicators and other items. Although none of these devices are shown in the figures, one of ordinary skill in the art could adapt them to the present dispensing device invention without undue experimentation. For instance, in the event that a full-length towel dispensing opening is desired within body 12, the dispensing opening could be similar to that as in a film cartridge for 35mm film. Excess chemical would be scraped from the towelette prior to dispensing, yielding a uniform amount of chemical on each towelette. Also for instance, a paste wax or other thick material could be dispensed from the side of one of the chambers through body 12 similar to a tooth paste opening. Furthermore, a thick material, such as a gel tire treatment, could be dispensed through a nozzle similar to a caulking tube, having a cap attached thereto. Needless to say, the multi-chamber dispensing device could utilize a caulking tube-like dispenser on one side with the dispensing device for treated towelettes on the other side. If three or four chambers were utilized, each chamber could have its own dispensing opening suitable for the article which it is dispensing.

Such a dispensing device could take all of the necessary creams, silicone treatments, waxes, and/or any other treatments to the site of the car in one container. This will fulfill all of the objects and advantages which were sought by this invention.

Therefore, the present invention discloses a dispensing device that fulfills all the advantages and objects sought by the inventors. The present invention is fully disclosed with several embodiments. However, the scope of the present invention is only meant to be limited by the appendant claims.

INDUSTRIAL APPLICABILITY

The present invention finds great utility in the cleaning industry, and finds especial utility in the car detailing industry.

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CLAIMS

What is claimed is:

- 5 1. A dispensing device for towelettes, comprising:
 a dispenser body having an inner cavity and having a top with
 openings to dispense towelettes therethrough;
 at least one bisecting wall disposed crosswise through the cavity to
 define at least two chambers within the dispenser body for containing and retaining
10 towelettes in proper position;
 said at least two chambers being adapted to contain preconditioned
 towelettes;
 a substantially watertight top cap dispenser piece adapted to be
 received at the top of the dispenser body, said top cap piece having substantially air-tight
15 openings therein, said openings correspondingly located at the top of each of said at least two
 chambers for dispensing towelettes therethrough; and
 a top cap lid being hingeably attached to said top cap dispenser piece
 such that said cap lid may be used to cover and seal the openings of the top cap dispenser
 piece from the atmosphere, whereby the pre-conditioned towelettes do not dry out.
20 2. The dispensing device of claim 1, wherein said dispenser body has an
 oval-shaped cross-section.
3. The dispensing device of claim 1, wherein said dispenser body has a
25 hand grip shape with an oval-shaped cross-sectional elongated body with indentations at the
 apexes of the oval shape, such that the dispenser body may be more easily gripped by a hand.
4. The dispensing device of claim 1, wherein the at least one bisecting
 wall prevents cross-mingling of the towelette chemical treatments.
- 30 5. The dispensing device of claim 1, wherein the at least two chambers
 are adapted to contain at least one saturated roll of pre-conditioned perforated towelettes.

6. The dispensing device of claim 1, wherein the at least two chambers are adapted to contain at least one saturated roll of pre-conditioned perforated towelettes, and at least one roll of dry perforated towelettes.

5 7. The dispensing device of claim 1, wherein at least one of the pre-conditioned perforated towelettes is saturated with windshield washing fluid.

8. The dispensing device of claim 1, wherein at least one of the pre-conditioned perforated towelettes is saturated with dashboard cleaning and conditioning
10 chemical treatments.

9. The dispensing device of claim 1, wherein at least one of the pre-conditioned perforated towelettes is saturated with tire sidewall cleaning and conditioning chemical treatments.
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10. The dispensing device of claim 1, wherein said air-tight openings are made with criss-cross slits in the corresponding openings located at the tops of the chambers.

11. The dispensing device of claim 1, wherein the top cap lid being hingeably attached to the top cap dispenser is adapted to form a water-tight seal when closed, such that the chemical treatments are not allowed to dry out.
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12. The dispensing device of claim 1, wherein said towelettes are in the form of interlocking individual pop-up sheets.
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13. The dispensing device of claim 1, further comprising a lip extending outwardly from the top cap lid for popping open with a thumb.

14. A dispensing device for automotive care towelettes saturated with car care liquid products, comprising:
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an elongated oval-shaped dispenser body with hand grip indentations at the apexes of the oval, said dispenser body having an inner cavity and having a top with openings to dispense towelettes therethrough;

a bisecting wall disposed crosswise through the cavity to define two chambers within the dispenser body for containing and retaining two rolls of saturated towelettes in proper position;

5 said chambers being adapted to each contain a roll of saturated preconditioned perforated towelettes;

a substantially watertight top cap dispenser piece adapted to be received at the top of the dispenser body, said top cap piece having criss-cross slit-like air-tight openings therein, said openings correspondingly located at the top of each of the two chambers for dispensing towelettes therethrough;

10 a top cap lid being hingeably attached to the top cap dispenser piece such that said cap lid may be used to cover and seal the openings of the top cap dispenser piece from the atmosphere, whereby the pre-conditioned towelettes do not dry out; and

a lip extending outwardly from the center of the top cap lid adapted to be popped open with a thumb.

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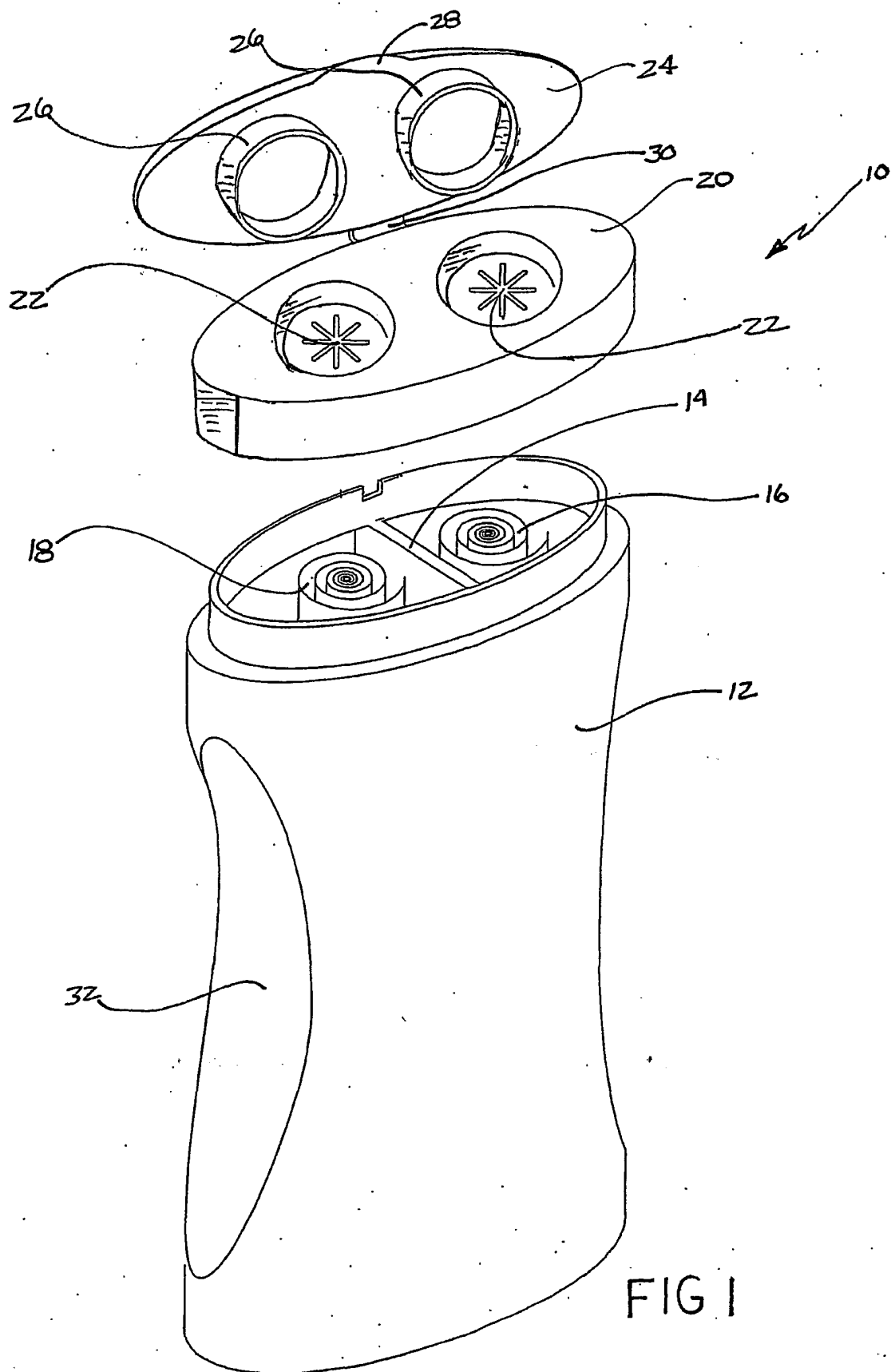
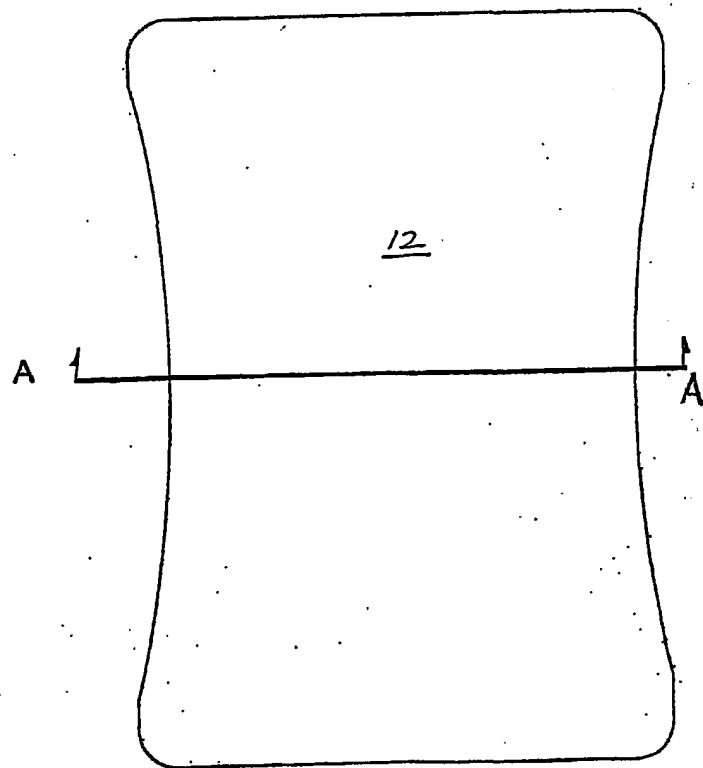
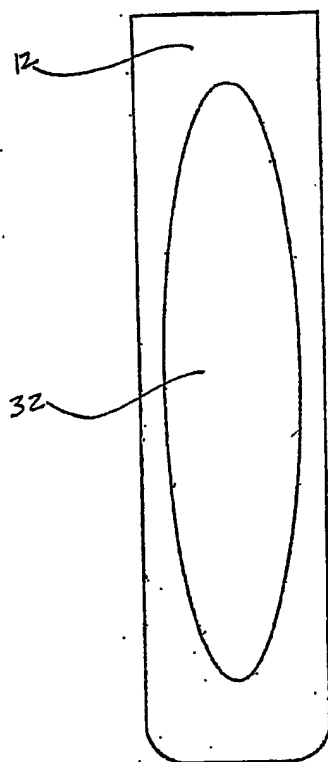
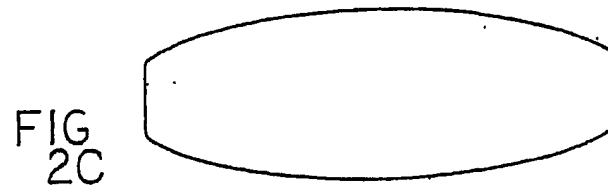
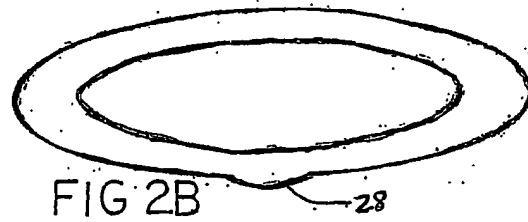
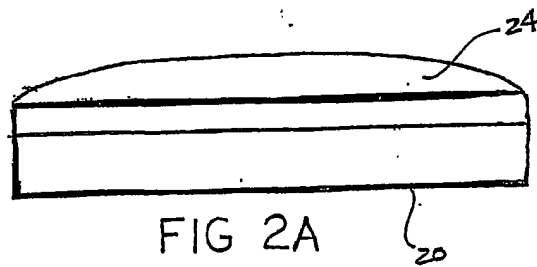


FIG. 1



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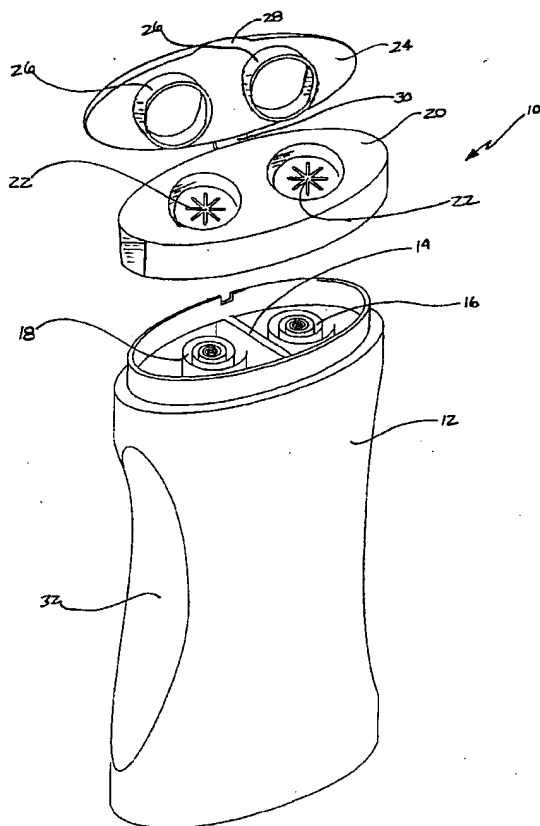
(71) Applicant (for all designated States except US): PETRO-FERM, INC. [US/US]; 2416 Lynndale Road, Fernandina Beach, FL 32034 (US).

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[Continued on next page]

(54) Title: DISPENSING DEVICE



(57) Abstract: A multi-chamber hand grip dispensing device (10) for towelettes (16, 18) having at least one bisecting wall (14) disposed crosswise through the device (10), defining at least two chambers in the body (12) of the device (10) for containing and dispensing a roll of towelettes (16, 18) from each chamber. The dispenser body (12) preferably holds towelettes (16, 18) which are saturated with various car care detailing compositions, such as special cleaning and defogging composition for windshields, tire dressing chemicals, dashboard cleaners and conditioners, leather or vinyl conditioners, and the like. The overall design is meant to allow for a single dispenser device to be carried a person that is cleaning or detailing their car, with some or all of the desirable chemical compositions saturated onto perforated tear-off towelettes that can be dispensed from the top of the dispensing device.

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US CL : 221/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,478,354 A (NOTHEIS) 23 October 1984 (23.10.1984) see the entire document	
A	US 5,467,893 A (LANDIS, II et al.) 21 November 1995 (21.11.1995) see the entire document	
A	US 5,560,514 A (FRAZIER) 01 October 1996 (01.10.1996) see the entire document	
A	US 5,595,786 A (McBRIDE, JR. et al.) 21 January 1997 (21.01.1997) see the entire document	
A	US 5,718,353 A (KANFER et al.) 17 February 1998 (17.02.1998) see the entire document	

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☐ See patent family annex.

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